

Government Computer News Finding common ground

*Online collection app lets
far-flung offices of
USDA's conservation
service use the same yardstick*

BY RICHARD W. WALKER
GCN STAFF

Nothing is more critical to measuring outcomes than having comprehensive information to analyze.

"Your system is no better than the data you collect," said Katherine Gugulis, deputy chief of strategic planning and accountability for the Agriculture Department's Natural Resources Conservation Service.

NRCS helps private landowners conserve their soil, water and other natural resources.

Agency employees at about 3,000 field offices around the country work with farmers, ranchers and other property owners to identify and correct conservation problems, such as soil erosion.

Ultimately, NRCS officials are looking for positive environmental outcomes from conservation planning and practices.

To that end, the agency has deployed a Web system to collect the vast amount of data compiled and filed by employees in the field and analyze that information against performance and results measures. To check out the reports systems, go to www.gcn.com and enter 186 in the Quickfind search box.

"It's a real-time system that managers at all levels of the agency can use to drill down into and get program data, outcomes, cost information and outlays," Gugulis said.



▶ "There was a lot of data collection going on and different parts of the organization were doing performance measurement, but it wasn't coming together in a meaningful manner,"

Agriculture's
Katherine Gugulis

The agency began building its Performance and Results Measurement System in 1998 when senior executives, led by newly named chief Pearlie Reed, decided something had to be done about major deficiencies in the old conservation-planning system, which used standalone data applications running on desktop terminals at field offices.

“There was a lot of data collection going on and different parts of the



organization were doing performance measurement, but it

wasn't coming together in a meaningful manner,” Gugulis said. “It didn't really tell you much about what was really happening in terms of performance, like soil erosion control or sediment reduction.”

Using the Government Performance and Results Act as a framework for formulating its goals, outcomes and measures, officials put together a streamlined, integrated approach to data collection and performance management. The Web was fundamental to the agency's plan to centralize its performance system.

Officials wanted to develop a user-friendly system, incorporating a data warehouse with linked databases. The vision was to gain access to performance information, anywhere, anytime.

“We determined that a Web-based system would be the way to go in the future for collecting the data,” Gugulis said.

In the summer of 1998, Agriculture's National Information Technology Center in Fort Collins, Colo., built the system and piloted it at about 30 field offices. The next year, the IT shop began rolling it out to the rest of the agency's field locations.

Many views

Since then, the IT shop has expanded and tweaked the system, adding, for example, mapping applications so that managers can visually track and analyze conservation data and performance.

Using a pull-down menu, managers can view program data geospatially on a national, regional or state basis. They also can scrutinize data by county, congressional district, conservation district or hydrologic unit.

“It gives users a lot of power to look at the data in different ways,” said Jon Vrana, an NRCS management analyst and former coordinator of the performance results and measurement system.

Vrana said about 85 percent of the on-line data is available to the general public. Some information, such as financial data, is restricted to agency users with log-on identifications and passwords.

The IT shop is completing a transition to a second iteration, called the Performance and Results System (PRS), which will provide more linkages to other applications. Officials expect the latest version to be fully implemented later this year. “We're doing more and more integration by bringing together some of our legacy systems and migrating them over to a centralized Web services framework,” said Wendall Oaks, project manager in Fort Collins.

PRS is a component of NRCS' Integrated Accountability System, a collection of performance management applications, including workload analysis, cost recovery and work force planning tools.

All of the applications are deployed in Web farms at USDA facilities in Fort Collins, Kansas City, Mo., and St. Louis, Oaks said.

Till that data

“We've consolidated our Web applications into those Web farms so that it's more efficient to implement security frameworks and provide mission-critical rollover capabilities,” he said. “If one site goes down, we can take advantage of running these mission-critical applications from multiple locations.”

The system links about 15 applications using a combination of Sun Microsystems Java 2 Enterprise Edition and Microsoft .Net Web services technologies, Oaks said. Officials plan to migrate to Microsoft .Net, he added.

Future enhancements to the system include use of handheld or tablet PCs to make it easier for field officials to enter data on the go.

“We're looking at ways to reduce the reporting burden on field people,” Gugulis said. “Our field people really work in the field. They go out and talk to farmers and ranchers. For them to come back to the office, work on the computer and then go back out isn't practical.”

The agency spends about \$1 million annually on maintenance and development of the system, said Ken Tootle, NRCS' Integrated Accountability System coordinator. All in all, the system is helping the agency meet the goals of GPRA and the President's Management Agenda, officials said.

“It is really starting to make the President's Management Agenda very achievable and very workable,” NRCS chief Bruce Knight said.

“Because we've got this accountability system in place, we're better able to fine-tune our measures, standards, goals and objectives,” he said.

“Each year, I see we're making exponential growth on our ability to make the PMA a very achievable thing.” ■